

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:

Karandikar et al.

Group Art Unit: 2164

Serial No.:

10/073,818

Attorney Docket No.: M-102-A

Filed:

February 11, 2002

For:

Low Expansion Metal-Ceramic Composite Bodies, and Methods for Making Same

Assistant Commissioner for Patents Washington, D.C. 20231

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SEP 1 2 2002

GROUP 3600

INFORMATION DISCLOSURE STATEMENT

Dear Sir:

Pursuant to 37 C.F.R. §1.56, applicants hereby call the attention of the U.S. Patent and Trademark Office to the references listed on the attached Form PTO-1449. The instant application is a Continuation-in-Part of Application Serial No. 09/378,367, filed on August 20, 1999. Applicants attach one copy of each reference that they have not already provided to the Office previously during the proceedings in this parent patent application.

Applicants present these references to the U. S. Patent and Trademark Office because the Office may deem that the references may be material to patentability. Applicants respectfully request that these references be expressly considered during the prosecution of this application and be made of record herein and appear on the "References Cited" section on any patent to issue herefrom.

Should the Examiner have any questions regarding any of these references, the Examiner is invited to telephone applicants' undersigned representative.

Respectfully submitted,

Jeffrey R. Ramberg

Jeffrey*[*R. Ramber Reg. No. 34,700

September 4, 2002 M Cubed Technologies, Inc. 1 Tralee Industrial Park Newark, DE 19711

Tel: (302) 454

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Enclosure: Form PTO-1449 with one copy of each reference not previously submitted



PTO/SB/08A (10-96)
Approved for use through 10/31/99. OMB 0651-0031
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

2002

Substitute	for form 1449A/F	PTO		Complete if Known		
				Application Number	10/073,818	
11	NFORMATIO	N DIS	CLOSURE	Filing Date	February 11, 2002	
STATEMENT BY APPLICANT				First Named Inventor	Karandikar, P.	
				Group Art Unit	2164	
	(use as many si	heets as	necessary)	Examiner Name		
Sheet	1	of	3	Attorney Docket Number	M-102-A	

	ПТ	U.S. Patent Docum	nent	U.S. PATENT DOCUMENTS		Pages, Columns, Lines,
Examiner Initials*	Cite No.1	Number	Kind Code ²	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Where Relevant Passages or Relevant Figures Appear
		3,622,283		Sara	11-23-1971	
		3,766,000		Gibson et al.	10-16-1973	
		3,807,996		Sara	04-30-1974	
		3,994,867		Baughman et al.	11-30-1976	
		4,005,183		Singer	01-25-1977	
		4,083,719		Arakawa et al.	04-11-1978	
		4,157,409		Levitt et al.	06-5-1979	DEAL
		4,376,803		Katzman	03-15-1983	HEU
		4,451,118		Stalcup et al.	05-29-1984	orn 1
		4,535,035	-	Smialek, et al.	08-13-1985	SEP 1
		4,791,076		Leggett, deceased, et al.	12-13-1988	ODOLL
		4,804,586		Tanaka et al.	02-14-1989	GRUU
		4,944,904	1 -	Singh et al.	07-31-1990	
	Ħ	5,015,540		Borom	05-14-1991	
		5,330,807	1	Williams	07-19-1994	
		5,834,115	†	Weeks, Jr. et al.	11-10-1998	
		5,993,934		Reese et al.	11-30-1999	
	1					

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite	Office ³	Foreign Patent Documer Number ⁴	Kind Code ⁵	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear	™
		DE	197 11 831	A1	Daimler-Benz	09-24-1998		V
		EP	1,124,074		Brembo	08-16-2001		
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Examiner	Date	
Signature	Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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^{&#}x27;Unique citation designation number. 'See attached Kinds of U.S. Patent Documents. 'Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 'For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 'Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 'Applicant is to place a check mark here if English language Translation is

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Substitute for form 1449A/PTO				Compl te if Known		
				Application Number	10/073,818	
l IN	IFORMATIO	N DISCL	OSURE	Filing Date	February 11, 2002	
l s	TATEMENT	BY APP	LICANT	First Named Inventor	Karandikar, P.	
Ī				Group Art Unit	2164	
1 ((use as many si	heets as ne	cessary)	Examiner Name		
Sheet	3	of	3	Attorney Docket Number	M-102-A	

Examiner	1 0:4-	OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal,	
Initials	Cite No.	serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	· · · -
		"BP Amoco Chemicals – Carbon Fibers", selected pages (9) from website www.bpamococarbonfibers.com, Copyright 2000 BP Amoco plc.	
		Max L. Lake, "Diamond Fibers for Heat Sinks*Diamond Fibers for Thermal Energy Management", 1991 BMDO Phase I SBIR Award (abstract only)	
		William E. Davis, "Affordable, High Performance Composites", 1996 Air Force Phase II SBIR Award (abstract only)	
		Mark J. Montesano, "Thermal Management for Advanced 3D Packaging of Payload Electronics", 1999 Air Force Phase I SBIR Award (abstract only)	
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¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁴Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

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Substitute f	or form 1449A/PT	ro		Complete if Known		
				Application Number	10/073,818	
IN	NFORMATION	I DIS	CLOSURE	Filing Date	February 11, 2002	
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				Group Art Unit	2164	
	(use as many she	ets as	necessary)	Examiner Name		
Sheet	2	of	3	Attorney Docket Number	M-102-A	

				U.S. PATENT DOCUMENTS		
		U.S. Patent Docu	ment			Pages, Columns, Lines,
Examiner Initials*	Cite No.1	Number	Kind Code ²	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Where Relevant Passages or Relevant Figures Appear
			<u> </u>			
		6,030,913		Heine et al.	02-29-2000	
		6,079,525		Dietrich et al.	06-27-2000	
		6,221,475	B1	Domergue et al.	04-24-2001	
		6,261,981	B1	Dietrich et al.	07-17-2001	
		6,328,834	B1	Rebstock et al.	12-11-2001	
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FOREIGN PATENT DOCUMENTS								
		Foreign Patent Document		ent		Date of Publication of	Pages, Columns, Lines Where Relevant	
Examiner Initials*	Cite No.1	Office ³	Number ⁴	Kind Code ⁶	Name of Patentee or Applicant of Cited Document	Cited Document MM-DD-YYYY	Passages or Relevant Figures Appear	T ⁰
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Examiner	Date	
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GROUP GLOO

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.:

10/073,818

Group Art Unit: 2164

Filing Date:

February 11, 2002

Atty Docket No.: M-102-A

First Named Inventor: Karandikar, P.

Title: Low Expansion Metal-Ceramic Composite Bodies, and Methods for Making Same

Assistant Commissioner for Patents Washington, D.C. 20231

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I hereby certify that the following correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to Assistant Commissioner for Patents Washington, D.C. 20231

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U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE aperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. 10/073,818 Application Number **TRANSMITTAL** 02/11/2002 **Filing Date** Karandikar, Prashant G. **FORM First Named Inventor** 2164 (to be used for all correspondence after initial filing) Group Art Unit **Examiner Name** M-102-A 7 Attorney Docket Number Total Number of Pages in This Submission **ENCLOSURES** (check all that apply) After Allowance Communication **Assignment Papers** Fee Transmittal Form (for an Application) to Group Appeal Communication to Board Fee Attached Drawing(s) of Appeals and Interferences Appeal Communication to Group Licensing-related Papers Amendment / Reply (Appeal Notice, Brief, Reply Brief) Petition After Final Proprietary Information Petition to Convert to a Affidavits/declaration(s) Provisional Application Status Letter Power of Attorney, Revocation Change of Correspondence Address Other Enclosure(s) (please **Extension of Time Request** identify below): Terminal Disclaimer (1) Certificate of Mailing Express Abandonment Request Request for Refund (2) Return Receipt Postcard Information Disclosure Statement CD, Number of CD(s). Certified Copy of Priority RECENTE Document(s) Remarks Response to Missing Parts/ SEP 1 2 2002 Incomplete Application Response to Missing Parts GROUP 360D under 37 CFR 1.52 or 1.53 SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT Firm Jeffrey R. Ramberg Reg. No. 34,700 Individual name Signature 09/04/2002 Date **CERTIFICATE OF MAILING** I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, Washington, DC 20231 on this date: 09/04/2002 Jeffrey R. Ramberg Typed or printed name 09/04/2002 Signature Date

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FEE TRANSMITTAL for FY 2002

Patent fees are subject to annual revision.

0.00 **TOTAL AMOUNT OF PAYMENT** (\$)

Complet if Known					
Application Number	10/073,818				
Filing Date	02/11/2002				
First Named Inventor	∖Karandikar, Prashant G.				
Examiner Name					
Group Art Unit	2164				
Attorney Docket No.	M-102-A				

METHOD OF PAYMENT	FEE CALCULATION (continued)				
The Commissioner is hereby authorized to charge					
indicated fees and credit any overpayments to: Deposit	Large Small				
Account Number 50-1020	Entity Entity Fee Fee Fee Fee Fee Paid Fee Fee Fee Fee Paid				
	Code (\$) Code (\$)				
Jeffrey R. Ramberg, Esq.	105 130 205 65 Surcharge - late filing fee or oath				
Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17	127 50 227 25 Surcharge - late provisional filing fee or cover sheet				
Applicant claims small entity status.	139 130 139 130 Non-English specification				
See 37 CFR 1.27	147 2,520 147 2,520 For filing a request for ex parte reexamination				
2. Payment Enclosed:	112 920* 112 920* Requesting publication of SIR prior to				
Check Credit card Money Other	Examiner action 113 1,840* 113 1,840* Requesting publication of SIR after				
FEE CALCULATION	Examiner action				
1. BASIC FILING FEE	115 110 215 55 Extension for reply within first month				
Large Entity Small Entity	116 400 216 200 Extension for reply within second month				
Fee Fee Fee Fee Description Code (\$) Code (\$) Fee Paid	117 920 217 460 Extension for reply within third month				
101 740 201 370 Utility filing fee	118 1,440 218 720 Extension for reply within fourth month				
106 330 206 165 Design filing fee	128 1,960 228 980 Extension for reply within fifth month				
107 510 207 255 Plant filing fee	119 320 219 160 Notice of Appeal				
108 740 208 370 Reissue filing fee	120 320 220 160 Filing a brief in support of an appeal				
114 160 214 80 Provisional filing fee	121 280 221 140 Request for oral hearing				
SUBTOTAL (1) (\$) 0.00	138 1,510 138 1,510 Petition to institute a public use proceeding				
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2. EXTRA CLAIM FEES Fee from	141 1,280 241 640 Petition to revive - unintentional				
Extra Claims below Fee Paid	142 1,280 242 640 Utility issue fee (or reissue)				
Total Claims20** = X = X =	143 460 243 230 Design issue fee				
Claims — ¬ ¬ — ¬ ^ — ¬ † — — †	144 620 244 310 Plant issue fee				
Multiple Dependent	122 130 122 130 Petitions to the Commissioner				
	123 50 123 50 Processing fee under 37 CFR 1.17(q)				
Large Entity Small Entity Fee Fee Fee Fee Description	126 180 126 180 Submission of Information Disclosure Stmt				
Code (\$) Code (\$) 103 18 203 9 Claims in excess of 20	581 40 581 40 Recording each patent assignment per property (times number of properties)				
102 84 202 42 Independent claims in excess of 3	146 740 246 370 Filing a submission after final rejection				
104 280 204 140 Multiple dependent claim, if not paid	(37 CFR § 1.129(a)) 149 740 249 370 For each additional invention to be				
109 84 209 42 ** Reissue independent claims over original patent	examined (37 CFR § 1.129(b))				
110 18 210 9 ** Reissue claims in excess of 20	179 740 279 370 Request for Continued Examination (RCE)				
and over original patent	169 900 169 900 Request for expedited examination of a design application				
SUBTOTAL (2) (\$) 0.00 Other fee (specify)					
**or number previously paid, if greater: For Reissues, see above	*Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$) 0.00				

SUBMITTED BY			Complete (if applicable)		
Name (Print/Type)	Jeffrey R. Ramberg	Registration No. (Attorney/Agent) 34,700	Telephone	(302) 454-8600 x319	
Signature	Jofferey R. K.	anteny	Date	09/04/2002	

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